No. 700,213. Patented May 20, 1902.

J. MACPHAIL.

THUMB LATCH FOR ADJUSTMENT LEVERS.

(Application filed Dec. 26, 1900.)

(No Model.)

Fig. 1.

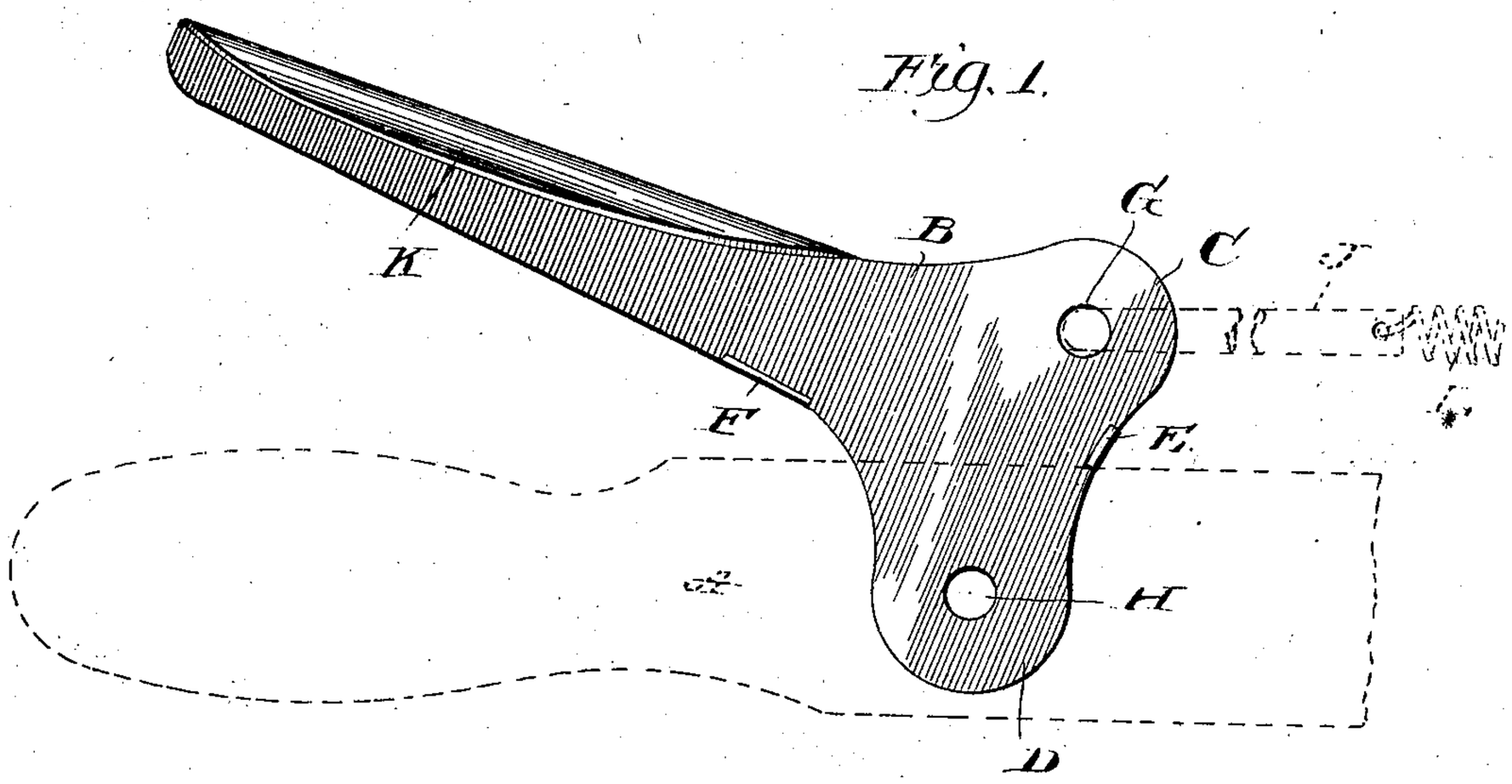


Fig. 2.

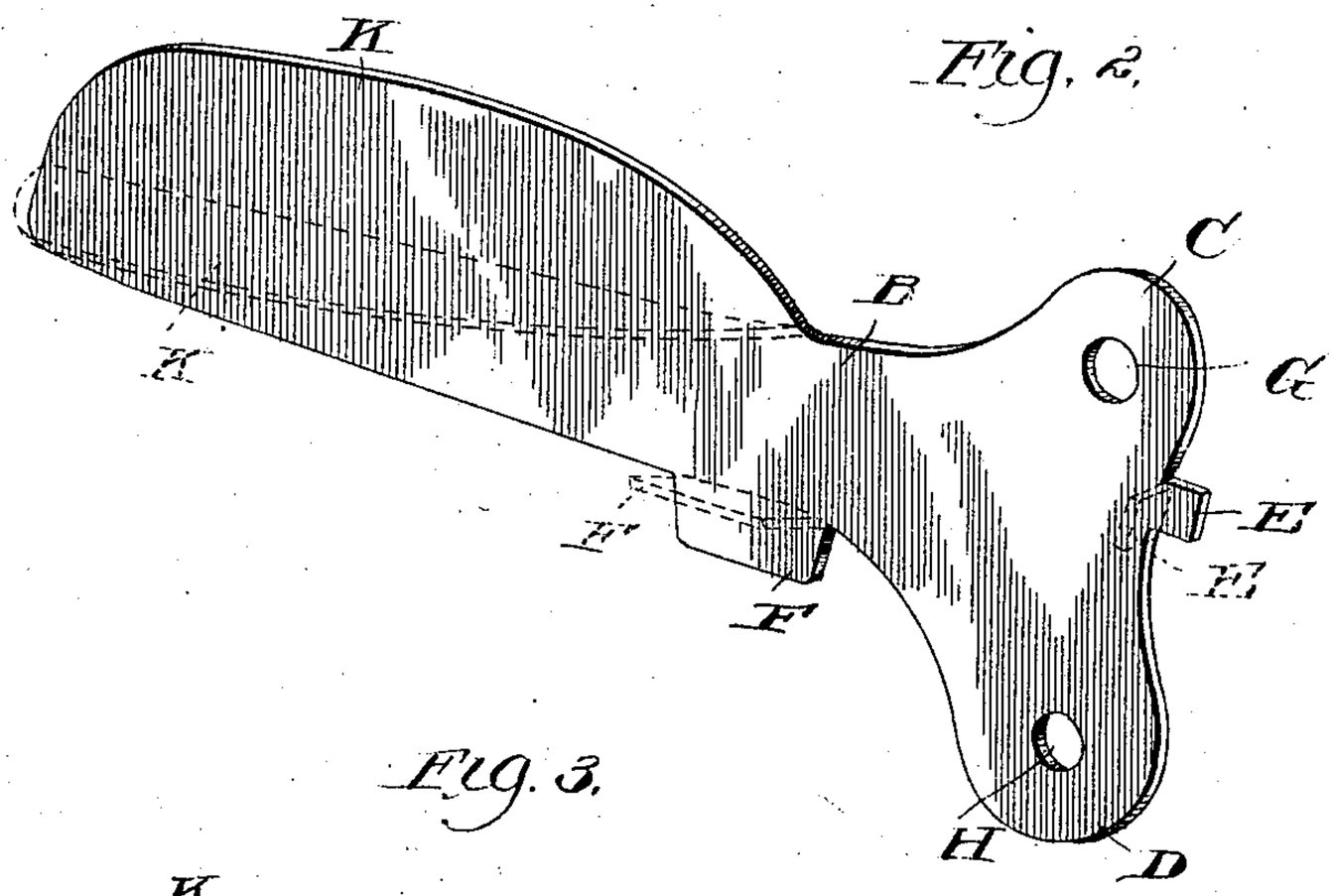
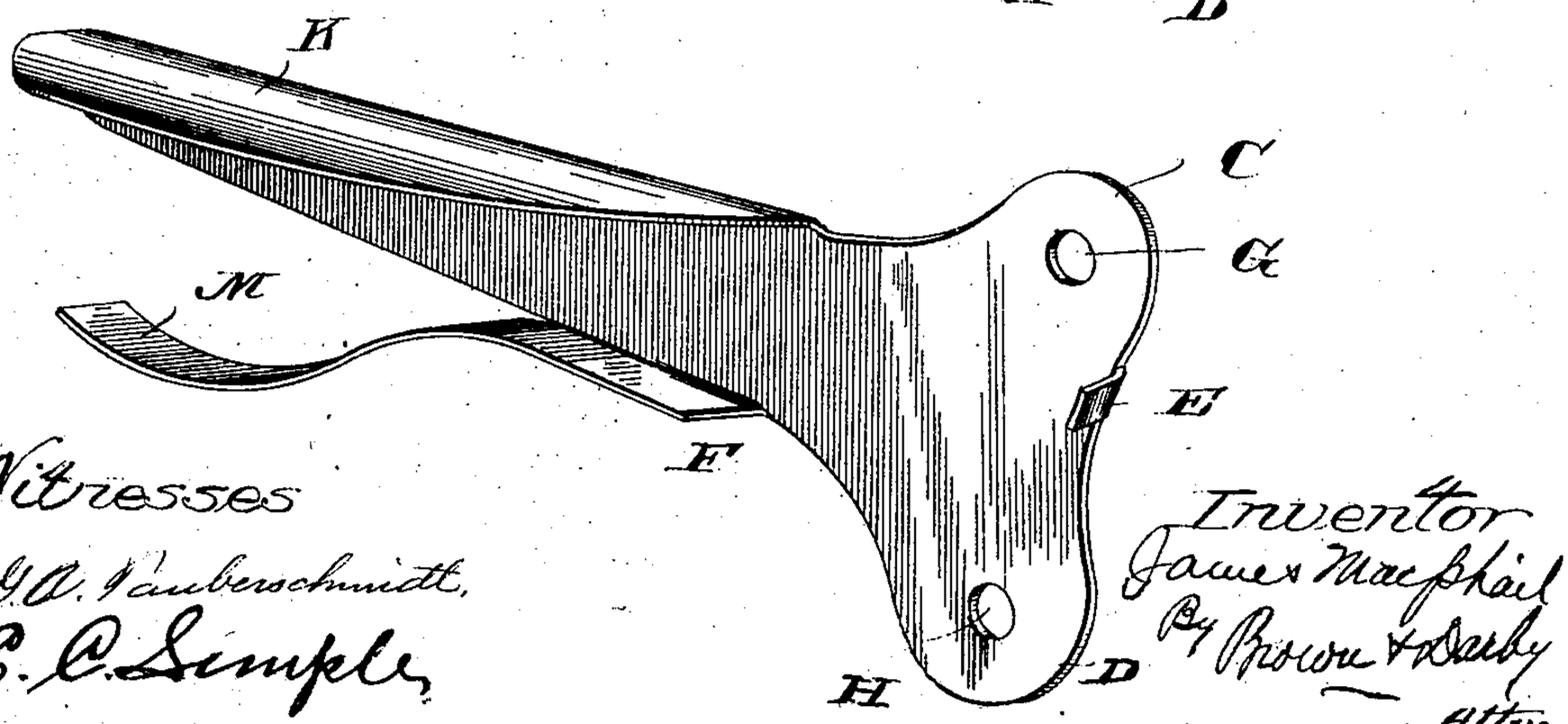


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES MACPHAIL, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE McCORMICK HARVESTING MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

THUMB-LATCH FOR ADJUSTMENT-LEVERS.

SPECIFICATION forming part of Letters Patent No. 700,213, dated May 20, 1902.

Application filed December 26, 1900. Serial No. 41,136. (No model.)

To all whom it may concern:

Be it known that I, JAMES MACPHAIL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Thumb-Latch for Adjustment-Levers, of which the following is a specification.

This invention relates to a thumb-latch for adjustment-levers.

The object of the invention is to provide a thumb-latch for adjustment-levers through which the lever-holding detent or pawl is actuated, and which thumb latch or handle is of simple and economical construction.

A further object of the invention is to provide a construction and arrangement of thumb-latch of the character mentioned wherein danger of pinching the hands or fingers of the operator is avoided.

The invention consists, substantially, in the construction, combination, location, and arrangement, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

Referring to the accompanying drawings and to the various views and reference-signs appearing thereon, Figure 1 is a view in side elevation of a thumb-latch embodying the principles of my invention, showing the application thereof to an adjustment-lever. Fig. 2 is a detached detail view in perspective of a blank from which a thumb-latch is formed, the formation of the thumb-latch being indicated in dotted lines. Fig. 3 is a detached view in perspective, showing a modified form of thumb-latch.

In the drawings reference-sign A designates the adjusting-lever; B, the thumb-latch.

In carrying out my invention I form the thumb-latch out of sheet metal, the blank indicated in Fig. 2 being formed with projections C D and with lugs E F, and the projections C D have holes or openings G H. This blank may be stamped or pressed and formed at one operation of any suitable die, one of the extensions or projections D C affording means for pivotally securing the latch to the adjustment-lever and the other affording means of connection for the rod or other suitable device (indicated at J, Fig. 1) to the detent or pawl in the usual manner. The lug E, which, as clearly shown, is formed in the base edge of the thumb-latch blank, is bent into angular relation with respect to the body or plane of the body of the latch, as indicated at dotted lines, Fig. 2, and in full lines, Figs. 1 and 3, to form a stop for the latch. Similarly the lug F, which, as shown, is formed on one of the edges of the blank-body, may also be bent into angular relation with respect to the plane or body of the blank and at a point on the opposite side of the point of pivotal connection of the latch to the adjustment-lever forms a stop for engagement with the adjustment-lever to limit the movement of such latch toward or upon the lever, thereby avoiding danger of pinching the fingers or hand of the operator when the latch is closed upon the lever. The other edge of the body of the blank or sheet is bent or turned over in angular relation with respect to the plane of the body, as indicated at K, thereby affording an ample grasping surface or handle and at the same time forming an angular shape, which serves to strengthen and give rigidity to the thumb-latch.

If desired, the thumb-latch may be normally held in open relation with respect to the adjustment-lever in the ordinary manner by means of a spring or otherwise, as may be desired. In Fig. 1 I have indicated in dotted lines a spring L, operating to hold the thumb-latch in the manner indicated, said spring operating through the rod J. If desired, however, a spring M may be formed integrally with the latch-blank (see Fig. 3) and at the same operation which forms the blank, as above explained, and since the blank is made of sheet metal properly stamped out a portion of the blank metal may efficiently serve the purpose of spring M.

From the foregoing description it will be seen that I provide an exceedingly simple and efficient thumb-latch for adjustment-levers.

A thumb-latch such as above described and constructed in the manner set forth while adapted for use generally with adjustment-levers is particularly well adapted for use with adjustment-levers employed in connection with harvesting or agricultural machinery and by reason of the economy of construction thereof aids in reducing the cost of manufacture of such machinery without detracting from the efficiency thereof or from strength or rigidity.

Having now set forth the object and nature of my invention, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent of the United States, is—

1. A thumb-latch blank formed of sheet metal having a thin flat body and extensions in the plane of such body portion adapted to be pivotally connected to the lever and to the detent or pawl, and having a lug or projection arranged to extend in angular relation with respect to the plane of the body of said latch to engage the lever to limit the movement of said latch relative to said lever, as and for the purpose set forth.

2. A thumb-latch blank formed of sheet metal, having a thin flat body provided with extensions in the plane of such body to form means for pivotally attaching said latch to the lever and to the pawl or detent, said body provided with angular lugs arranged to engage the lever to limit the movement of said latch relative to said lever, as and for the purpose set forth.

3. A thumb-latch blank formed of sheet metal, having a thin flat body provided with extensions in the plane of such body, forming means of attaching such latch to the lever and to the pawl or detent, said body having lugs or wings arranged on opposite sides of the point of attachment of the latch to the lever and projecting in angular relation with respect to the plane of the body of such latch to engage the lever to limit the movement of such latch relative to such lever, as and for the purpose set forth.

4. A thumb-latch blank formed of sheet metal, having a thin flat body provided with extensions arranged in the plane of the body thereof to form means of attaching the same to the lever and to the detent or pawl, said latch provided with an integral lip forming a spring, as and for the purpose set forth.

In witness whereof I have hereunto set my hand, this 18th day of December, 1900, in the presence of the subscribing witnesses.

JAMES MACPHAIL.

Witnesses:
E. C. SEMPLE,
S. E. DARBY.